

Middle School Engineering Design							
NGSS Code	Performance Expectations	Maglev Module					
		Timing Newton's Apple	Running the Gauntlet	Caution – 6% Grade Ahead!	Graphing the Grade	Float Like a Butterfly, Sting Like a Bee	
MS-ETS1	Matter and Its Interactions						
MS-ETS1-1	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.						
MS-ETS1-2	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.						
MS-ETS1-3	Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.						
MS-ETS1-4	Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.						